

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 7,437,521 B1
APPLICATION NO. : 10/643,741
DATED : October 14, 2008
INVENTOR(S) : Scott et al.

Page 1 of 10

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Title Page; item (56);

On page 2, under "Other Publications", in column 2, line 13, delete "dimensional" and insert -- dimensional --, therefor.

On page 2, under "Other Publications", in column 2, line 47, delete "Journakl" and insert -- Journal --, therefor.

On page 3, under "Other Publications", in column 1, line 13, before "Architectures" delete "Parallel".

On page 3, under "Other Publications", in column 1, line 41, delete "Spacial" and insert -- Spatial --, therefor.

On page 3, under "Other Publications", in column 2, line 50, after "Office" insert -- Action --.

On page 3, under "Other Publications", in column 2, line 52, after "Office" insert -- Action --.

On page 4, under "Other Publications", in column 2, line 52, delete "OARN" and insert -- NOAR --, therefor.

On page 4, under "Other Publications", in column 2, line 53, delete "AL1owance" and insert -- Allowance --, therefor.

In column 8, line 13, delete "useg" and insert -- used --, therefor.

In column 9, line 23, delete "[Aj]₂" and insert -- [Aj]² --, therefor.

In column 9, line 40, delete "and exclusive" and insert -- and-exclusive --, therefor.

In column 14, line 26, delete "LClk" and insert -- Lclk --, therefor.

In column 14, line 55, delete "VS118" and insert -- VS 118 --, therefor.

In column 16, line 13, delete "LCLK." and insert -- Lclk. --, therefor.

In column 17, line 8, delete "LCLK," and insert -- Lclk, --, therefor.

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 7,437,521 B1
APPLICATION NO. : 10/643,741
DATED : October 14, 2008
INVENTOR(S) : Scott et al.

Page 2 of 10

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In column 18, line 59, delete “LCLK.” and insert -- Lclk. --, therefor.

In column 18, line 64, delete “LCLK” and insert -- Lclk --, therefor.

In column 19, line 4, delete “LCLK.” and insert -- Lclk. --, therefor.

In column 19, line 10, delete “LCLK.” and insert -- Lclk. --, therefor.

In column 19, line 17, delete “LCLK.” and insert -- Lclk. --, therefor.

In column 20, line 40, delete “LCLK” and insert -- Lclk --, therefor.

In column 20; line 40, delete “v issues” and insert -- vissues --, therefor.

In column 20, line 41, delete “LCLK.” and insert -- Lclk. --, therefor.

In column 20, line 49, delete “LClk” and insert -- Lclk --, therefor.

In column 21, line 22, delete “LCLK.” and insert -- Lclk. --, therefor.

In column 21, line 26, delete “LCLK.” and insert -- Lclk. --, therefor.

In column 21, line 60, delete “LCLK” and insert -- Lclk --, therefor.

In column 21, line 61, delete “LCLK.” and insert -- Lclk --, therefor.

In column 22, line 5, delete “LCLK.” and insert -- Lclk. --, therefor.

In column 22, line 7, delete “LCLK.” and insert -- Lclk. --, therefor.

In column 22, line 15, delete “LCLK.” and insert -- Lclk. --, therefor.

In column 23, line 19, delete “LCLK” and insert -- Lclk --, therefor.

In column 23, line 20, delete “LCLK,” and insert -- Lclk, --, therefor.

In column 23, line 31, delete “LCLK.” and insert -- Lclk. --, therefor.

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 7,437,521 B1
APPLICATION NO. : 10/643,741
DATED : October 14, 2008
INVENTOR(S) : Scott et al.

Page 3 of 10

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In column 23, line 51, delete “(VMAP0_VMAP31)” and insert
-- (VMAP0-VMAP31) --, therefor.

In column 24, line 42, delete “LCLK” and insert -- Lclk --, therefor.

In column 24, line 43, delete “LCLK” and insert -- Lclk --, therefor.

In column 24, line 48, delete “LCLK” and insert -- Lclk --, therefor.

In column 24, line 54, delete “LCLK” and insert -- Lclk --, therefor.

In column 24, line 59, delete “LCLK” and insert -- Lclk --, therefor.

In column 24, line 63, delete “LCLK” and insert -- Lclk --, therefor.

In column 24, line 65, delete “LCLK” and insert -- Lclk --, therefor.

In column 25, line 3, delete “LClk” and insert -- Lclk --, therefor.

In column 25, line 8, delete “LClk” and insert -- Lclk --, therefor.

In column 25, line 32, delete “LClk” and insert -- Lclk --, therefor.

In column 25, line 32, delete “v issues” and insert -- vissues --, therefor.

In column 25, line 35, delete “LClk.” and insert -- Lclk. --, therefor.

In column 25, line 41, delete “LClk” and insert -- Lclk --, therefor.

In column 25, line 45, delete “(VBFlage)” and insert -- (VBFlag) --, therefor.

In column 25, line 54, delete “VBFlag” and insert -- VBFlag --, therefor.

In column 26, line 8, delete “LClk.” and insert -- Lclk. --, therefor.

In column 26, line 12, delete “LClk.” and insert -- Lclk. --, therefor.

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 7,437,521 B1
APPLICATION NO. : 10/643,741
DATED : October 14, 2008
INVENTOR(S) : Scott et al.

Page 4 of 10

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In column 26, line 41, delete “LClks” and insert -- Lclk --, therefor.

In column 26, line 41, after “two” delete “LClks.” and insert -- Lclk. --, therefor.

In column 26, line 51, delete “LClk.” and insert -- Lclk. --, therefor.

In column 27, line 3, after “instructions” insert -- . --.

In column 27, line 60, delete “LClk.” and insert -- Lclk. --, therefor.

In column 28, line 9, delete “LClk.” and insert -- Lclk. --, therefor.

In column 28, line 19, delete “LClk.” and insert -- Lclk. --, therefor.

In column 28, line 31, delete “LClk.” and insert -- Lclk. --, therefor.

In column 28, line 33, delete “LClk,” and insert -- Lclk, --, therefor.

In column 28, line 34, delete “LClk” and insert -- Lclk --, therefor.

In column 28, line 62, delete “VBFlag” and insert -- VBFlag --, therefor.

In column 28, line 63, delete “LClk.” and insert -- Lclk. --, therefor.

In column 29, line 9, delete “LClk.” and insert -- Lclk. --, therefor.

In column 29, line 18, delete “LClk” and insert -- Lclk --, therefor.

In column 29, line 24, delete “LClk.” and insert -- Lclk. --, therefor.

In column 29, line 32, delete “(VTLB0_VTLB3)” and insert -- (VTLB0-VTLB3) --, therefor.

In column 30, line 42, delete “VMS126.” and insert -- VMS 126. --, therefor.

In column 30, line 58, delete “(LBUF0_LBUF7)” and insert -- (LBUF0-LBUF7) --, therefor.

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 7,437,521 B1
APPLICATION NO. : 10/643,741
DATED : October 14, 2008
INVENTOR(S) : Scott et al.

Page 5 of 10

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In column 31, line 23, delete “VBFlag” and insert -- VBFlag --, therefor.

In column 31, line 55, delete “LCLK” and insert -- Lclk --, therefor.

In column 31, line 62, delete “LCLK.” and insert -- Lclk. --, therefor.

In column 32, line 6, delete “fourVTLBs” and insert -- four VTLBs --, therefor.

In column 32, line 6, delete “(VTLB0_VTLB3).” and insert -- (VTLB0-VTLB3). --, therefor.

In column 32, line 64, delete “EFU” and insert -- EIU --, therefor.

In column 33, line 3, delete “(6.5)” and insert -- (6 . . . 5) --, therefor.

In column 33, line 23, delete “LClk,” and insert -- Lclk, --, therefor.

In column 33, line 29, delete “LClk.” and insert -- Lclk. --, therefor.

In column 37, line 3, delete “LClk” and insert -- Lclk --, therefor.

In column 37, line 10, delete “LClk.” and insert -- Lclk. --, therefor.

In column 37, line 14, delete “LClk,” and insert -- Lclk, --, therefor.

In column 38, line 16, delete “Q1240.” and insert -- Q1 240. --, therefor.

In column 38, line 43, delete “Instruction Processing” and insert
-- Instruction-Processing --, therefor.

In column 39, line 61, delete “Lsync V,S” and insert -- Lsync V, S --, therefor.

In column 40, line 5, delete “Lsync_V_s” and insert -- Lsync_v_s --, therefor.

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 7,437,521 B1
APPLICATION NO. : 10/643,741
DATED : October 14, 2008
INVENTOR(S) : Scott et al.

Page 6 of 10

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In column 40, line 11, delete “lsync_V_s_flag” and insert -- lsync_v_s_flag --, therefor.

In column 41, line 27, delete “theVU” and insert -- the VU --, therefor.

In column 41, line 28, delete “V 113” and insert -- VU 113 --, therefor.

In column 41, line 42, delete “sendsthe” and insert -- sends the --, therefor.

In column 41, line 42, delete “V 113” and insert -- VU 113 --, therefor.

In column 41, line 54, delete “I Msync” and insert -- Msync --, therefor.

In column 46, lines 43-44, delete ““Timeouts”” and insert -- “Time-outs” --, therefor.

In column 48, line 14, delete “thatfollow” and insert -- that follow --, therefor.

In column 60, line 57, delete “newval (ValueAR(i, L)” and insert
-- newval(ValueAR(i, L) --, therefor.

In column 61, line 41, delete “is” and insert -- 1s --, therefor.

In column 61, line 51, delete “0000” and insert -- 000 --, therefor.

In column 64, line 54, delete “S type” and insert -- S-type --, therefor.

In column 65, line 48, delete “S type” and insert -- S-type --, therefor.

In column 68, line 38, delete “gsync” and insert -- Gsync --, therefor.

In column 68, line 39, delete “gsync” and insert -- Gsync --, therefor.

In column 68, line 42, delete “gsync” and insert -- Gsync --, therefor.

In column 68, line 44, delete “gsync” and insert -- Gsync --, therefor.

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 7,437,521 B1
APPLICATION NO. : 10/643,741
DATED : October 14, 2008
INVENTOR(S) : Scott et al.

Page 7 of 10

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In column 68, line 48, delete “gsync” and insert -- Gsync --, therefor.

In column 68, line 51, delete “gsync” and insert -- Gsync --, therefor.

In column 68, line 52, delete “gsync” and insert -- Gsync --, therefor.

In column 68, line 59, delete “gsync” and insert -- Gsync --, therefor.

In column 69, line 2, delete “gsync” and insert -- Gsync --, therefor.

In column 69, line 4, delete “gsync” and insert -- Gsync --, therefor.

In column 69, line 14, delete “gsync” and insert -- Gsync --, therefor.

In column 69, line 17, delete “gsync.” and insert -- Gsync. --, therefor.

In column 69, line 25, delete “gsync” and insert -- Gsync --, therefor.

In column 69, line 27, delete “gsync” and insert -- Gsync --, therefor.

In column 69, line 29, delete “gsync” and insert -- Gsync --, therefor.

In column 69, line 31, delete “gsync” and insert -- Gsync --, therefor.

In column 69, line 34, delete “gsync” and insert -- Gsync --, therefor.

In column 69, line 39, delete “gsync” and insert -- Gsync --, therefor.

In column 69, line 43, delete “gsync” and insert -- Gsync --, therefor.

In column 69, line 45, delete “gsync” and insert -- Gsync --, therefor.

In column 69, line 47, delete “gsync” and insert -- Gsync --, therefor.

In column 69, line 58, delete “gsync” and insert -- Gsync --, therefor.

In column 69, line 60, delete “gsync” and insert -- Gsync --, therefor.

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 7,437,521 B1
APPLICATION NO. : 10/643,741
DATED : October 14, 2008
INVENTOR(S) : Scott et al.

Page 8 of 10

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In column 70, line 3, delete “gsync” and insert -- Gsync --, therefor.

In column 70, line 7, delete “gsync.” and insert -- Gsync. --, therefor.

In column 70, line 21, delete “gsync” and insert -- Gsync --, therefor.

In column 70, line 22, delete “gsync” and insert -- Gsync --, therefor.

In column 70, line 25, delete “gsync” and insert -- Gsync --, therefor.

In column 70, line 27, delete “gsync” and insert -- Gsync --, therefor.

In column 70, line 30, delete “gsync” and insert -- Gsync --, therefor.

In column 70, line 34, delete “gsync” and insert -- Gsync --, therefor.

In column 71, line 42, in Claim 1, delete “instruction” and insert -- instruction, --, therefor.

In column 71, line 46, in Claim 1, before “plurality” delete “first”.

In column 71, line 54, in Claim 1, after “of” insert -- execution of --.

In column 72, line 23, in Claim 5, before “plurality” delete “first”.

In column 72, line 37, in Claim 5, delete “circuits;” and insert -- circuits; and --, therefor.

In column 72, line 40, in Claim 5, after “tion” delete “based on a second memory operation instruction”.

In column 72, line 56, in Claim 5, delete “instruction processing” and insert -- instruction-processing --, therefor.

In column 72, line 58, in Claim 5, delete “S type” and insert -- S-type --, therefor.

In column 73, lines 31-32, in Claim 7, after “instruction” delete “based on a second memory operation instruction”.

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 7,437,521 B1
APPLICATION NO. : 10/643,741
DATED : October 14, 2008
INVENTOR(S) : Scott et al.

Page 9 of 10

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In column 73, lines 61-67, in Claim 8, delete “a plurality of Lsync queues connected to the memory interface, including a first Lsync queue and a second Lsync queue,

wherein each of the plurality of Lsync queues holds pending memory requests and enforces an ordering in the commitment of the pending memory requests to memory;” and insert -- a plurality of Lsync queues connected to the memory interface, including a first Lsync queue and a second Lsync queue, wherein each of the plurality of Lsync queues holds pending memory requests and enforces an ordering in the commitment of the pending memory requests to memory; --, therefor.

In column 74, line 49, in Claim 8, delete “S type” and insert -- S-type --, therefor.

In column 74, line 50, in Claim 8, delete “S type” and insert -- S-type --, therefor.

In columns 75-76, lines 25-32 and lines 1-3, in Claim 10, delete “inserting one or more memory requests into at least one of the Lsync queues based on a

second memory operation instruction executed in one of the instruction-processing circuits; processing memory requests from the first Lsync queue; selectively halting further processing of memory requests from the first Lsync queue based on the first Lsync synchronization marker reaching a predetermined point in the first Lsync queue until the corresponding second Lsync synchronization marker reaches a predetermined point in the second Lsync queue,” and insert -- inserting one or more memory requests into at least one of the Lsync queues based on a second memory operation instruction executed in one of the instruction-processing circuits;

processing memory requests from the first Lsync queue; selectively halting further processing of memory requests from the first Lsync queue based on the first Lsync synchronization marker reaching a predetermined point in the first Lsync queue until the corresponding second Lsync synchronization marker reaches a predetermined point in the second Lsync queue; --, therefor.

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 7,437,521 B1
APPLICATION NO. : 10/643,741
DATED : October 14, 2008
INVENTOR(S) : Scott et al.

Page 10 of 10

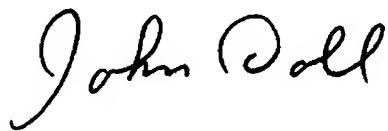
It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In column 76, line 21, in Claim 10, delete "S type" and insert -- S-type --, therefor.

In column 76, line 22, in Claim 10, delete "S type" and insert -- S-type --, therefor.

Signed and Sealed this

Tenth Day of March, 2009



JOHN DOLL
Acting Director of the United States Patent and Trademark Office